



Cooking a World of New Tastes



SEGMENT 1

Cooking With Skill

- Basic Culinary Skills
- Knife Skills





SEGMENT 1

Cooking With Skill

America's tastes are changing. As we become more ethnically diverse and health-conscious, we are discovering a whole new world of food in our homes, our communities, and in our schools. The **USDA's School Meals Initiative for Healthy Children** encourages more exciting new approaches to serving healthier choices to our Nation's children than ever before. The *USDA's Tool Kit for Healthy School Meals* offers new recipes that are lower in fat, higher in flavor, and spiced up with an international flair. School Lunch Challenge recipes are also featured. *Recipe suggestions are included at the end of each segment.*

This segment begins with the basic culinary skills that every food production professional should know: proper knife skills, knife safety, and knife cuts that make foods appealing.

Here's your chance to enhance your basic culinary skills. These techniques can add to your home cooking skills as well!

Learning Objectives

- Apply culinary skills by demonstrating the proper knife techniques used with different types of fruits and vegetables
- Correctly hold and use a chef's knife
- Identify major culinary tools used in professional kitchens
- Demonstrate knife safety
- Execute knife cuts, such as slicing, dicing, and cubing.
- Define culinary terms
- Identify priorities in food preparation and food service

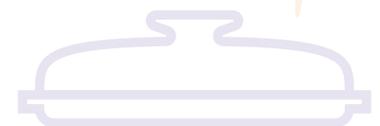
Team with a chef and he/she can demonstrate knife skills and define culinary terms, such as:

Mis en place: French term that means "everything in its place," from equipment to food.

Mirepoix: a finely diced combination of onions, carrots, and celery; used for flavor.

*"Healthy Meals!
Attractive Meals!
Appetizing Meals!
Meals that meet the
Dietary Guidelines,
but also meet the
needs of our students."*

— Jessie Yearwood,
Skyline High School,
Dallas, Texas





Basic Culinary Skills

Priorities in Food Preparation and Service

1. Taste

The single most important goal we have when preparing food is to make it taste good.

Taste is affected by

- Proper seasoning
- Execution of basic food preparation skills
- Consistency
- Freshness and quality of the product

2. Presentation

The appearance of food comes second only to taste in terms of importance. Some of the things that impact on presentation are:

- Portion size
- Proper food placement or arrangement
- Composition
 - Avoid repeating the same colors, methods of preparation, etc.
- Execution of basic culinary knife skills
 - Properly and uniformly cut meats, vegetables, etc.

3. Degree of Doneness/Proper Cooking

- Red meats cooked to proper internal temperature
- White meats (fish and poultry) fully cooked with clear juices
- Vegetables and starches - green vegetables should be bright

4. Temperature

- Hot foods hot
- Cold foods cold

Summary

Before we serve any meals from our kitchens, we should be able to answer “Yes” to each of the following questions:

1. Does it taste good?
2. Does it look good?
3. Is it cooked properly?
4. Is it at the correct temperature?



Specifics in Food Preparation and Service

1. Always use produce that is in season.

Seasonal produce is usually of better quality and less expensive.

2. On every plate or platter, provide contrast in

- Colors: always serve one green vegetable and at least one non-green vegetable. Try not to serve vegetables that are the same color as the entree.
- Cooking methods: Use a variety, such as steaming, baking, stir-fry.
- Shapes: Arrange a variety of shapes on one plate.
- Textures: Provide different textures, such as coarse, smooth, mashed, puree.
- Flavoring or seasoning: Use an assortment of herbs, spices, vanilla, lemon flavoring.

3. Accompaniments should complement the entree.

Example: Avoid combining fried vegetables and starches with fried entrees.

A general rule is: The more complex the entree, the simpler the accompaniments. The simpler the entree, the more complex the accompaniments can be.





Knife Skills



Chef's Tip

“Using the right tool helps you get precision cuts and makes the job easier!”

— Chef Ron De Santis, CMC
Culinary Institute
of America

Culinary Knife Kit and Kitchen Tools



French Knife: An all-purpose knife used for most cutting and dicing – also known as a chef's knife



Boning Knife: A knife with a narrow blade that is used to cut around the bones in meat during butchering



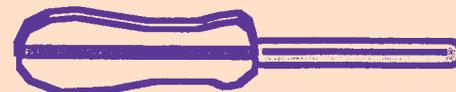
Slicer: Long knife used for carving meats



Paring Knife: Small knife used for trimming and shaping vegetables



Fork: Long tines used for picking up larger pieces of product



Vegetable Peeler: Used to remove the skin from vegetables and fruit.



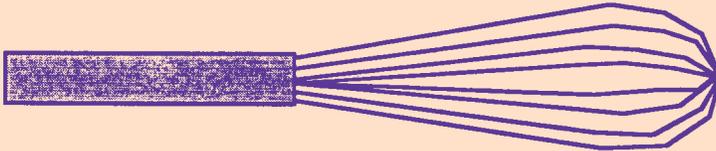
Zester: This tool is used to remove the zest (skin) from citrus fruits



Channel Knife: This tool is used to cut grooves in lemons or other firm-skinned fruit.



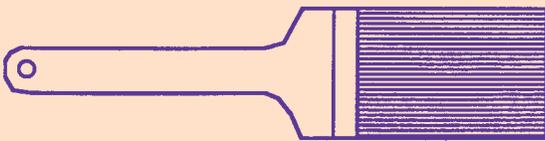
Sharpening Steel: Used for sharpening the edge of a knife



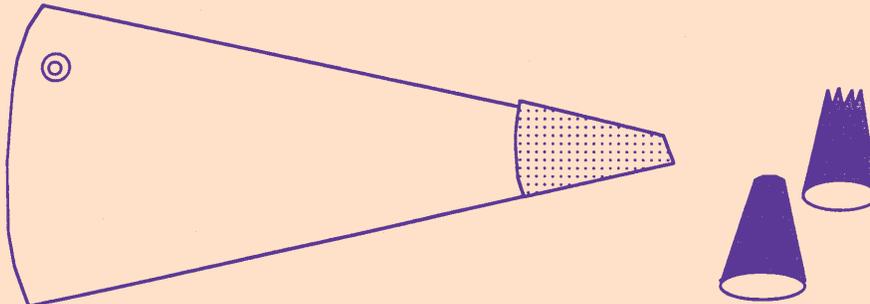
Wire Whip: Used for mixing and whipping



Parisian Scoop: Also known as a melon scoop, used to shape melon or potatoes into round balls



Pastry Brush: Used for brushing on glazes, butter, or other coatings



Pastry Bag and tips: Used for piping potatoes or other soft foods into fancy shapes (ex. Duchesse potatoes)

Safety Tip

Kitchen Cutlery Safety

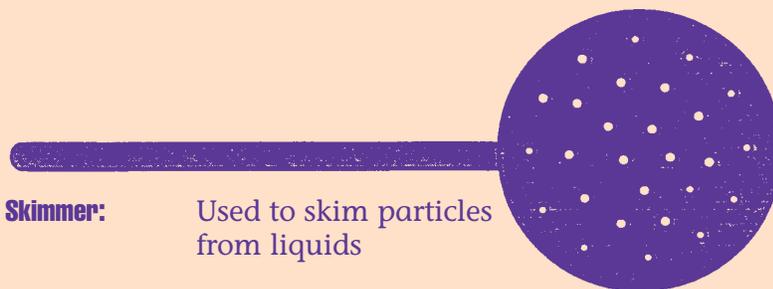
Using sharp knives is important. They are safer because you do not have to exert as much pressure.



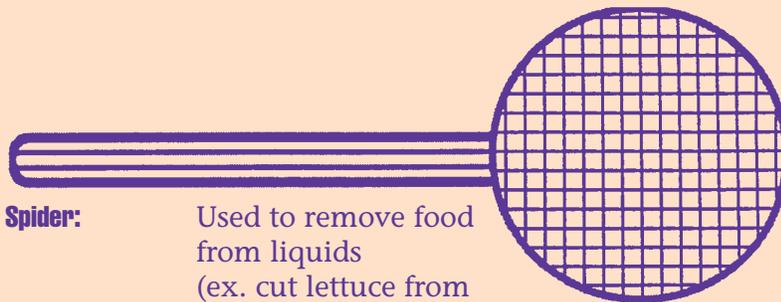
Culinary Knife Kit and Kitchen Tools (continued)



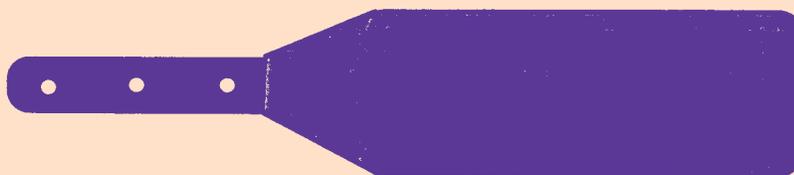
Rubber Bowl Scraper: Used to scrape food from pans or bowl



Skimmer: Used to skim particles from liquids

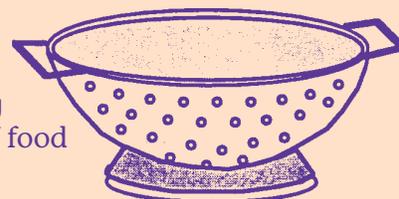


Spider: Used to remove food from liquids (ex. cut lettuce from washing center)



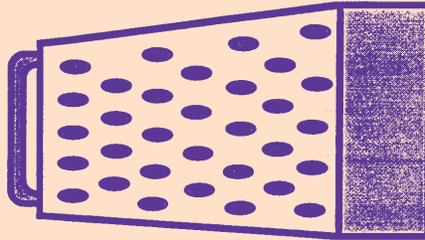
Off-set Spatula: Used for turning or removing foods from the grill.

Colander: Used for draining large amounts of food



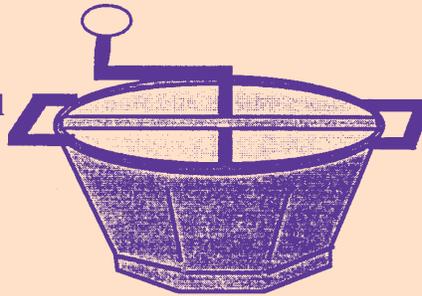
Box Grater:

Used to grate firm foods, size of grate determines how fine the food will be



Food Mill:

Used for pureeing foods, (ex. mashed potatoes)



Solid Serving Spoon:

Used to serve items or stir products



Slotted Serving Spoon:

Used to allow excess liquids to drain away



Perforated Serving Spoon:

Used to allow excess liquids to drain away



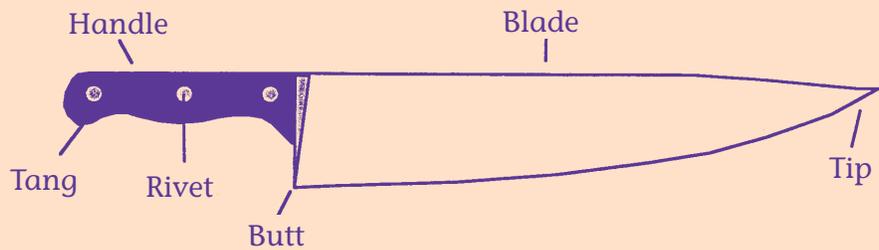
Wooden Spoon:

Used for stirring food during the cooking process



Kitchen Cutlery Safety Rules

The French Knife & Knife Safety

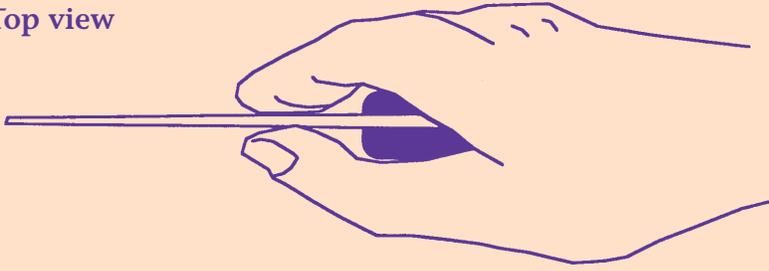


Kitchen Cutlery Safety Rules

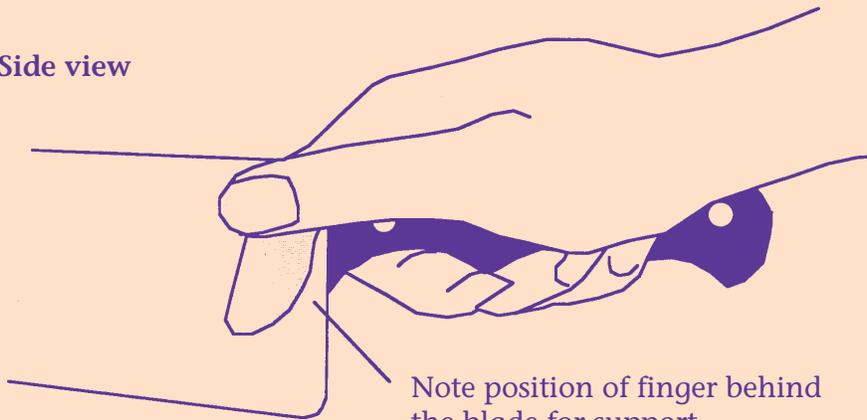
1. Always use a sharp knife. A sharp knife is safer than a dull one because it requires less pressure in cutting. If sharp, the knife will not slip as easily, and your hand will not tire as quickly.
2. Use the correct size and type of knife for the job. Hold the knife firmly in your hand and cut away from your body. Use a wood or polyethelene cutting board.
3. Make sure knives placed on flat surfaces are never covered with towels, napkins, or other materials. After handling a knife, place it in a cleared area with the blade pointed away from your body and away from the edge of the table or cutting area.
4. Do not grab blindly for a knife; reach deliberately for the handle. When handing a knife to another person, point the handle toward him or her.

How To Hold a Knife

Top view



Side view



Note position of finger behind the blade for support

Reference:
Culinary Skills Workshop for Healthy School Meals, USDA/FCS 1996
Continuing Education at the Culinary Institute of America

Safety Tip

Knife Safety

- Don't cover knives
- Keep knives on a flat surface
- Keep knives pointed away from you
- Hold a knife behind the blade, curl fingers in, and use the knife as a guide.





Safety Tip

All fruits and vegetables must be washed before bringing them to any cooking area.

Knife Skills

Demonstration of Apple Cubes

Use a chef's knife and cut straight down, leaving the core in. Rest apple on flat side, cut down, leaving core in again. Turn apple; cut, and soon apple is cored. Discard core. Turn apple 90 degrees, cut it again and then cut into cubes. Add a little lemon juice to prevent discoloration.

Demonstration of Cucumber - Deseeding/Slicing

Trim the two ends of the cucumber. Use the peeler to peel the skin off. Use chef's knife to cut the cucumber lengthwise. Take the back of the peeler and run it down the cucumber to deseed it. To slice, use chef's knife and cut down vertically or slice on an angle for a more appealing cut.

Demonstration of Carrot - Cuts/Peeling

Use peeler to peel carrots. Use both sides of the peeler. Oblique cut: Roll cut, or 1/3 turn cut. Roll carrot 1/3 of the way around, and cut on a sharp angle. This provides an interesting and different cut - a new look to carrots.

Demonstration of Red Pepper - a Julienne Cut

Remove seeds from pepper. Rest red pepper on flat side and cut lengthwise. Red pepper is cut into thin strips. Julienne strips can be short or long. Use julienne strips on the salad bar.

Demonstration of Onion - Peeling/Slicing/Cubing

Chill onion before cutting to keep eyes from watering! Use a chef's knife and cut onion down the center, placing it flat. Take off root end and discard. Find the lines on the onion and begin to slice along the lines. Cut onion very fine. When onion feels wobbly, flip it down so that you have a nice sturdy base, and cut. Turn onion 90 degrees and chop. Dicing refers to cutting in specific sizes, such as fine, small, medium, or large. Cubing is not as precise, just squaring off in uniform sizes.

Knife Cuts

Brunoise (1/8" x 1/8" x 1/8")



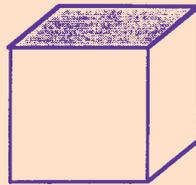
Small Dice (1/4" x 1/4" x 1/4")



Medium Dice (1/3" x 1/3" x 1/3")



Large Dice (3/4" x 3/4" x 3/4")



Fine Julienne (1/16" x 1/16" x 1 or 2")



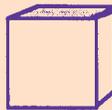
Julienne/ Allumette (1/8" x 1/8" x 1 or 2")



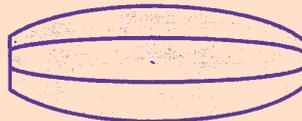
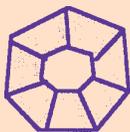
Battonet (1/4" x 1/4" x 2 or 2-1/2")



Paysanne (1/2" x 1/2" x 1/8")



Tornee 2" length with 7 sides



Reference:
 Culinary Skills Workshop for Healthy School Meals, USDA/FCS I996
 Continuing Education at the Culinary Institute of America



Demonstration of Parsley Chopping

Be sure parsley is washed.

Place down and twist it into one small bunch. Use the chef's knife with tip of the knife down, fingers bent upward, hold the tip down, and chop with rocking motion.

Demonstration of Cauliflower Cutting

Take the chef's knife and remove the bottom part of the cauliflower; break off the small leaves.

Use paring knife and cut around the core. As you cut, you will see the florets pull off. Remove and take apart. If sizes are still too big, take the chef's knife and cut into smaller pieces. Cauliflower is ready for the salad bar or for vegetable dip.

Demonstration of Broccoli

Similar to cauliflower. Use chef's knife and cut off broccoli stems (stems can be peeled and sliced - good for stir-fry).

Cut a little bit more and broccoli florets keep separating off. Use paring knife or the chef's knife to portion easily.

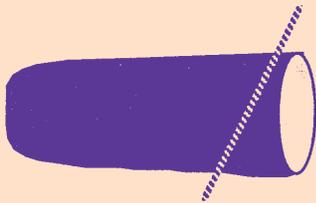
Demonstration of Carrot Sticks

Use peeler to peel skin off carrots. (There is a knife on both sides.) Draw the peeler back and forth.

Determine the length of the carrot stick. Cut the carrot in those lengths. Cut it so there is a flat surface, lay it on the flat surface and simply cut into the desired size of sticks. Great for snacks and vegetable dip.

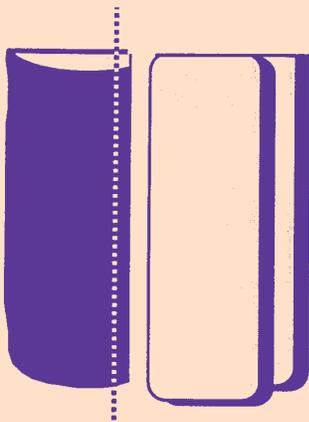


Slicing, Julienne, Dicing



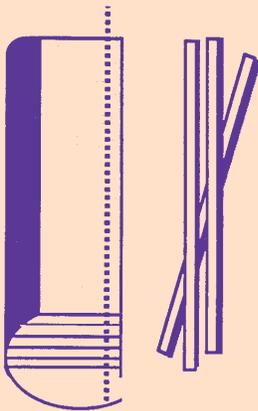
Slicing:

Cut vegetable crosswise into desired thickness



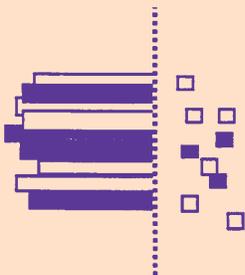
Slicing:

Cut vegetable lengthwise into desired thickness



Julienne:

Stack slices and cut again lengthwise into desired thickness; this will yield julienne



Dicing:

Lay julienne in a bundle, cut crosswise into desired thickness; this will yield dice



Questions & Answers

- 1. Question:** How do you make foods eye-appealing?
Answer: Use natural foods with lots of color. Presentation is important. Use two different colors, like broccoli and cauliflower. You can also use natural shapes or knife cut shapes to add interest.
- 2. Question:** What is the purpose of using so many knives?
Answer: Using the correct tool helps in getting precision cuts. It also makes the job easier.
- 3. Question:** Is it important that knives be sharp?
Answer: Yes. Sharp knives are safer. They cut easier with less pressure. You are less likely to cut yourself with a sharp knife.
- 4. Question:** How do you prevent fresh cut-up fruit from turning brown?
Answer: Add a few drops of lemon juice to the cut fruit.
- 5. Question:** Does the lemon juice affect the taste?
Answer: A little but you should just add enough to prevent discoloration.
- 6. Question:** Is there a way to peel an onion so you don't have tears?
Answer: Chilling the onion will help.
- 7. Question:** What is the difference between cubing and dicing?
Answer: Cubing and dicing are the same except for the size of the finished pieces. Dicing is smaller than cubing.
- 8. Question:** How do you cut fresh cauliflower?
Answer: Remove green leaves. Cut out core. Cut pieces into correct size.
- 9. Question:** How do you cut fresh broccoli?
Answer: Cut stem at base of florets. Continue to cut stem until you reach the top. Cut pieces into correct size.
- 10. Question:** How do you properly cut carrot sticks?
Answer: Cut into desired length. Cut off one side to make a flat edge. Cut into sticks.

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Recipes are from USDA's Tool Kit for Healthy School Meals:
Recipes and Training Materials.

